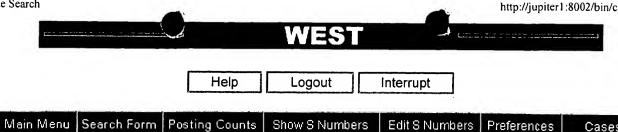
Cases

Preferences



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12 and L6	169	

Database:	JPO Abstracts Database EPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins		
Search:		<u>^</u>	Refine Search
	Recall Text Clear		

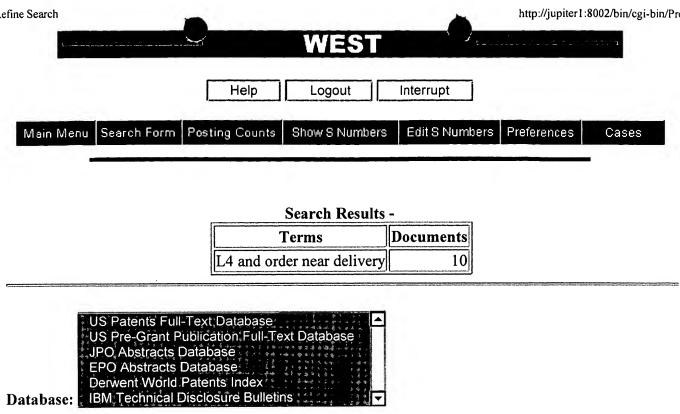
Search History

DATE: Monday, February 04, 2002 Printable Copy Create Case

US Patents Full-Text Database

Set Name side by side	Query	Hit Count	Set Name result set
DB = USPT, I	PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR		
<u>L7</u>	12 and L6	169	<u>L7</u>
<u>L6</u>	L5 and copy	372	<u>L6</u>
<u>L5</u>	L4 and low near resolution	1083	<u>L5</u>
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<u>L3</u>	L2 and host	1085	<u>L3</u>
<u>L2</u>	L1 and (internet or www or network)	5220	<u>L2</u>
<u>L1</u>	digital near image	34146	<u>L1</u>

END OF SEARCH HISTORY



Search:		<u>↑</u>	Refine Search
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DATE: Monday, February 04, 2002 Printable Copy Create Case

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<u>L5</u>	L4 and order near delivery	10	<u>L5</u>
<u>L4</u>	13 and digital near image\$	554	<u>L4</u>
<u>L3</u>	data near manag\$	24669	<u>L3</u>
<u>L2</u>	rout\$ and distribut\$ near digital near imag\$	11	<u>L2</u>
<u>L1</u>	rout\$ near distribut\$ near digital near imag\$	0	<u>L1</u>

END OF SEARCH HISTORY

Generate Collection Print

L7: Entry 26 of 169

File: USPT

Nov 20, 2001

US-PAT-NO: 6321231

DOCUMENT-IDENTIFIER: US 6321231 B1

TITLE: Data management and order delivery system

DATE-ISSUED: November 20, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Jebens; John H.Tierra VerdeFLCarlson; Lowell D.MolineILJames; Jeffrey ScottBettendorfIA

US-CL-CURRENT: 345/428, 355/40, 355/70, 396/639, 707/10, 707/102

CLAIMS:

What is claimed is:

1. A data management system comprising:

an electronic storage facility for providing storage for digital assets of a plurality of unrelated asset provider users, at least some of the digital assets stored in the electronic storage facility including first sets of data each having a first bandwidth communication requirement and second sets of data each representative of an associated one of the first sets of data and having a second bandwidth communication requirement less than the first bandwidth communication requirement, the electronic storage facility storing the digital assets of a first one of the asset provider users such that the digital assets of the first asset provider user can only be accessed by authorized users identified by the first asset provider and such that the digital assets of the first asset provider users are transparent to users that are not authorized by the first asset provider user;

means for allowing an authorized user identified by the first asset provider to download a particular second set of data from the storing means to a first location;

means for accepting a work order from the authorized user at the first location wherein the work order identifies a second location as an intended destination of the work order, identifies the particular second set of data, and further includes data developed outside the system;

job order development means responsive to the accepting means for developing a job order including both (a) the first set of data associated with the particular second set of data and (b) the data developed outside the system; and

means for electronically routing the job order to the second location.

- 2. A system as defined in claim 1 wherein the first set of data comprises <u>high</u> resolution <u>digital images</u>, and the second set of data comprises <u>low resolution</u> <u>digital images</u>.
- 3. A system as defined in claim 2 wherein the $\underline{\text{high resolution digital images}}$ are input to the system by the first asset provider user.
- 4. A system as defined in claim 3 further comprising image handling means for processing the <u>high resolution digital images</u> input by the first asset provider user, the image handling means being adapted to develop <u>low resolution</u> images of the <u>high resolution digital images</u> received from the first asset provider user and to

- store both the high resolution digital images and the legresolution images in the storage facility in an addressable fashion for future searching.
- 5. A system as defined in claim 1 further comprising event tracking means for monitoring and recording predefined events occurring in the system.
- 6. A system as defined in claim 5 wherein the predefined events comprise one of the group consisting of: storing new data in the storing means; deleting data from the storing means; connecting to the system; disconnecting from the system; conducting a search of the data stored in the storing means; downloading data from the first set of data stored in the storing means; downloading data from the second set of data stored in the storing means; and routing the work order to a user.
- 7. A system as defined in claim 5 further comprising means for developing an indication of a charge to be assessed a user when at least one of the predefined events is recorded by the event tracking means.
- 8. A system as defined in claim 7 wherein the charge developing means automatically generates invoices on a periodic basis.
- 9. A system as defined in claim 8 wherein the routing means automatically routes the invoices to at least one user responsible for payment.
- 10. A system as defined in claim 1 wherein the routing means automatically electronically routes the job order to the second location.
- 11. A system as defined in claim 10 wherein the routing means automatically sends a facsimile to the second location notifying the second location of the job order being routed.
- 12. A system as defined in claim 10 wherein the routing means automatically sends an e-mail message to the second location notifying the second location of the job order being routed.
- 13. A system as defined in claim 1 wherein the job order defines a document to be printed, the second location is a printing facility, and the first set of data downloaded by the downloading means is to be printed as part of the document.
- 14. A system as defined in claim 13 wherein the allowing means, the accepting means, the routing means and the downloading means are implemented by at least one programmed processing device.
- 15. A system as defined in claim 14 wherein the at least one programmed processing device is implemented by a file storage server and an autolog server interconnected for co-operative operation.
- 16. A system as defined in claim 15 wherein the at least one programmed processing device is further implemented by a database server.
- 17. A system as defined in claim 14 wherein the at least one programmed device, the first location, and the second location are interconnected by a $\underline{\text{network}}$.
- 18. A system as defined in claim 1 further comprising a communication device to permit users to communicate with the system.
- 19. A system as defined in claim 18 wherein the communication device is implemented by an internet server, a telecommunications server, and an e-mail server.
- 20. A system as defined in claim 1 wherein the storing means is implemented by an image storage device and a data storage device.
- 21. A system as defined in claim 20 wherein the image storage device comprises an optical disk robot and an optical data reader.
- 22. A system as defined in claim 20 wherein the data storage device comprises a RAID system.
- 23. A system as defined in claim 1 further comprising means for searching the storing means in response to user inputs to develop the particular second set of data.
- 24. A system as defined in claim 1 wherein the data developed outside the system and

included in the work of er comprises a page description anguage file and the first set of data in the job order comprises a bit mapped image.

25. A system as defined in claim 1 further comprising:

means for receiving digital data from an asset provider user to be stored in the storage facility; and,

means for compressing the digital data received by the receiving means in accordance with a parameter set by the asset provider user.

- 26. A system as defined in claim 25 wherein the digital data received from the asset provider user is used to develop the first and second data sets.
- 27. A system as defined in claim 25 wherein the parameter defines a compression format to be employed by the compressing means.
- 28. A system as defined in claim 25 wherein the parameter defines a degree of compression to be employed by the compressing means.
- 29. A system as defined in claim 25 further comprising means for developing an indication of a charge to be assessed the as provider user for storing the digital data in the storage facility.
- 30. A system as defined in claim 29 wherein the charge developing means develops the charge based on the amount of storage memory utilized by the digital data.
- 31. A digital data storage facility as defined in claim 30 wherein the charge developing means develops a further charge based on the amount of time the digital data is stored in the storage facility.
- 32. A system as defined in claim 1 further comprising means for translating the particular second set of data into a file format defined by the authorized user before the allowing means downloads the particular second set of data.
- 33. A system as defined in claim 1 further comprising means for translating data received by the system into a file format defined by the authorized user before storing the received data in the facility.
- 34. A data management system comprising:
- a storage device for providing paid storage for digital assets of a plurality of unrelated asset provider users, at least some of the digital assets stored in the electronic storage facility including first sets of data each having a first bandwidth requirement and second sets of data each representative of an associated one of the first sets of data and having a second bandwidth requirement less than the first bandwidth requirement, the storage device storing the digital assets of a first one of the asset provider users such that the digital assets of the first asset provider user can only be accessed by authorized users identified by the first asset provider and such that the digital assets of the first asset provider user are transparent to users that are not authorized by the first asset provider user;
- a search engine for searching among sets of data stored in the storage device;
- a communication device operable to allow remote communication by a user with the system including means for sending a particular second set of data to a user in response to a user request to the search engine;

means for accepting a user-defined work order from a first location via the communication device wherein the work order identifies a second location as an intended destination of the work order, identifies the particular second set of data, and includes further data developed outside the system;

a router for electronically routing a job order to a second location, the job order including

the first set of data associated with the particular second set of data identified in the work order.

- 35. A <u>digital image</u> management and order delivery system comprising:
- a storage device for providing storage for digital images of a plurality of

unrelated asset provided users, the storage device storage the <u>digital images</u> of a first one of the asset provider users such that the <u>digital images</u> of the first asset provider user can only be accessed by authorized users identified by the first asset provider user and such that the <u>digital images</u> of the first asset provider user are transparent to users that are not authorized by the first asset provider user;

- a searching engine for developing a subset of the <u>digital images</u> stored in the storage device by the first asset provider user in response to inputs received from a first authorized user identified by the first asset provider user, the searching engine being adapted to download <u>low resolution copies</u> of the subset to the first authorized user;
- a job order developer responsive to inputs received from the first authorized user for developing a job order which includes: a) at least one <a href="https://distribution.com/high-resol
- a router for electronically routing the job order developed by the job order developer to a second user specified by the first authorized user.
- 36. A system as defined in claim 35 wherein the <u>digital images</u> are input to the system by the first asset provider user via a communication device.
- 37. A system as defined in claim 36 further comprising an image handler for processing the <u>digital images</u> input by the first asset provider user, the image handler being adapted to develop <u>low resolution images of the digital images</u> received from the first asset provider user and to store both the <u>digital images</u> received from the first asset provider and the <u>low resolution</u> images thereof in the storage device in an addressable fashion for future searching.
- 38. A system as defined in claim 36 further comprising means for translating the digital images received by the system into a file format defined by the first asset provider user before storing the digital images in the storage device.
- 39. A system as defined in claim 35 further comprising an event tracker for monitoring and recording predefined events occurring in the system.
- 40. A system as defined in claim 39 wherein the predefined events comprise one of the group consisting of: storing a new <u>digital image</u> in the storage device; deleting a stored <u>digital image</u> from the storage device; connecting to the system; disconnecting from the system; conducting a search of the <u>digital images</u> stored in the storage device; downloading a <u>low resolution copy</u> of one of the <u>digital images</u> stored in the storage device; downloading a <u>high resolution copy</u> of one of the digital images stored in the storage device; and routing a work order to a user.
- 41. A system as defined in claim 39 further comprising means for developing an indication of a charge to be assessed a user when at least one of the predefined events is recorded by the event tracker.
- 42. A system as defined in claim 41 wherein the charge developing means automatically generates invoices on a periodic basis.
- 43. A system as defined in claim 42 wherein the router automatically routes the invoices to the users responsible for payment.
- 44. A system as defined in claim 35 further comprising means for developing miniaturized depictions of the subset developed by the searching engine.
- 45. A system as defined in claim 44 further comprising first means for downloading the miniaturized depictions of the subset to the first authorized user, and, second means responsive to inputs from the first authorized user for downloading at least one <u>low resolution copy</u> corresponding to a selected one of the miniaturized depictions.
- 46. A system as defined in claim 44 wherein the router automatically electronically routes the job order to the second user.
- 47. A system as defined in claim 46 wherein the router automatically sends a facsimile to the second user notifying the second user of the job order being routed.

- 48. A system as defined in claim 46 wherein the router automatically sends an e-mail message to the second user notifying the second user of the job order being routed.
- 49. A system as defined in claim 35 wherein the file defines a document to be printed, the second user is a printer, and the at least one $\frac{\text{high resolution}}{\text{high resolution}}$ image is to be printed as part of the document.
- 50. A system as defined in claim 49 wherein the searching engine, the job order developer and the router are implemented by at least one programmed processing device.
- 51. A system as defined in claim 50 wherein the at least one programmed processing device is implemented by a file storage server and an autolog server interconnected for co-operative operation.
- 52. A system as defined in claim 51 wherein the at least one programmed processing device is further implemented by a database server.
- 53. A system as defined in claim 50 wherein the at least one programmed processing device, the first user, and the second user are interconnected by a network.
- 54. A system as defined in claim 35 further comprising a communication device for receiving and transmitting data to one or more remote users.
- 55. A system as defined in claim 54 wherein the communication device is implemented by an internet server, a telecommunications server, and an e-mail server.
- 56. A system as defined in claim 35 wherein the storage device is implemented by an image storage device and a data storage device.
- 57. A system as defined in claim 56 wherein the image storage device comprises an optical disk robot and an optical data reader.
- 58. A system as defined in claim 56 wherein the data storage device comprises a RAID system.
- 59. A system as defined in claim 35 further comprising:

means for receiving digital data from the first asset provider user to be stored in the storage device; and,

means for compressing the digital data received by the receiving means in accordance with a parameter set by the first asset provider user.

- 60. A system as defined in claim 35 wherein the parameter defines a compression format to be employed by the compressing means.
- 61. A system as defined in claim 35 wherein the parameter defines a degree of compression to be employed by the compressing means.
- 62. A system as defined in claim 36 further comprising means for developing an indication of a charge to be assessed the first asset provider user for storing the digital data in the storage device.
- 63. A system as defined in claim 62 wherein the charge developing means develops the charge based on the amount of storage memory utilized by the digital data.
- 64. A digital data storage facility as defined in claim 63 wherein the charge developing means develops a further charge based on the amount of time the digital data is stored in the storage device.
- 65. A system as defined in claim 35 further comprising means for translating the low resolution copies of the subset into a file format defined by the first authorized user before the searching engine downloads the low resolution copies of the subset to the first authorized user.
- 66. A digital image management and order delivery system comprising:
- a storage device for providing paid storage for digital assets of a plurality of unrelated asset provider users, at least some of the digital assets stored in the storage device containing digital images, the digital images including both a high

resolution copy and a www resolution copy of each of the digital images;

a charge developer which accesses charges to the plurality of unrelated asset provider users based on at least one of an amount of storage memory utilized by the digital assets of the charged asset provider user and an amount of time the digital assets of the charged asset provider user are stored in the storage device;

a processor coupled to the storage device for permitting access to the <u>digital</u> images of a first asset provider user by a first predefined user identified by the first asset provider user, the processor providing a searching engine for addressing and retrieving the <u>digital</u> images, the processor being adapted to download <u>low</u> resolution copies of the <u>digital</u> images to the first predefined user identified by the first asset provider user and to provide <u>high resolution</u> copies of the <u>digital</u> images to a second predefined user specified by the first predefined user; the processor being further adapted to automatically electronically route documents created by the first predefined user to the second predefined user, the processor downloading <u>high resolution</u> copies corresponding to the low resolution copies of the <u>digital</u> images identified by the first predefined user to the second predefined user for inclusion in the documents.

67. A method of managing digital images comprising the steps of:

storing a <u>high resolution and a low resolution copy</u> of each of a first plurality of <u>digital images</u> provided by a first asset provider user in an electronically searchable format on a storage device;

storing a <u>high resolution and a low resolution copy</u> of each of a second plurality of <u>digital images</u> provided by a second asset provider user in an electronically searchable format on the storage device;

permitting a first authorized user identified by the first asset provider user to locate and download a <u>low resolution copy</u> of at least one of the <u>digital images</u> provided by the first asset provider user, the second plurality of images being transparent to the first authorized user;

receiving an electronic file defining a document from the first authorized user, the document being designed to incorporate the at least one <u>digital image</u> and data developed outside of the system;

receiving instructions from the first authorized user directing that the electronic file be delivered to a second user; and,

automatically electronically routing the electronic file and a $\frac{\text{high resolution copy}}{\text{of the at least one }}$ digital image to the second user identified by the first authorized user.

68. A digital data storage facility for providing storage for a plurality of third party users comprising:

a storage device;

means for receiving digital data from a user in the plurality;

means for compressing the digital data received by the receiving means in accordance with a parameter set by the user; and,

means for storing the digital data compressed by the compressing means in the storage device.

- 69. A digital data storage facility as defined in claim 68 wherein the parameter defines a compression format to be employed by the compressing means.
- 70. A digital data storage facility as defined in claim 68 wherein the parameter defines a degree of compression to be employed by the compressing means.
- 71. A digital data storage facility as defined in claim 68 further comprising means for developing an indication of a charge to be assessed the user for storing the digital data in the storage device.
- 72. A digital data storage facility as defined in claim 71 wherein the charge developing means develops the charge based on the amount of storage memory utilized by the digital data.

- 73. A digital data storage facility as defined in claim 72 wherein the charge developing means develops a further charge based on the amount of time the digital data is stored in the storage device.
- 74. A digital image management and order delivery system comprising:
- a storage device for storing $\underline{\text{digital images}}$ received from a first $\underline{\text{digital image}}$ provider and a second $\underline{\text{digital image}}$ provider;
- a searching engine for developing a subset of the <u>digital images</u> stored in the storage device in response to inputs received from a first user, the searching engine being adapted to download \underline{low} resolution copies of the subset to the first user;
- a job order developer responsive to inputs received from the first user for developing a job order which includes at least one https://doi.org/10.1001/job/html image contained in the subset and identified by the first user; and,
- a router for electronically routing the job order developed by the job order developer to a second user specified by the first user; and
- a user identifier for discriminating between users communicating with the system to control user access to the <u>digital images</u> stored in the storage device, the user identifier limiting access to the <u>digital images</u> provided by the first <u>digital image</u> provider to at least one user identified by the first <u>digital image</u> provider, wherein the <u>digital images</u> provided by the first image provider are transparent to all users except users identified by the first <u>digital image</u> provider.

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L5: Entry 3 of 10

File: PGPB

May 31, 2001

PGPUB-DOCUMENT-NUMBER: 20010002204 PGPUB-FILING-TYPE: new-utility

DOCUMENT-IDENTIFIER: US 20010002204 A1

TITLE: Data management and order delivery system

PUBLICATION-DATE: May 31, 2001

INVENTOR - INFORMATION:

CITY STATE COUNTRY RULE-47 NAME FLUS Jebens, John H. Tierra Verde US Moline ILCarlson, Lowell D. TΑ US James, Jeffrey Scott Bettendorf

ASSIGNEE - INFORMATION:

NAME CITY STATE COUNTRY TYPE CODE

Marshall, O'Toole, Gerstein, Murray & Borun 02

APPL-NO: 09/ 731359 [PALM]
DATE FILED: December 6, 2000

RELATED-US-APPL-DATA:

RLAC RLPC RLKC RLFD RLAN US A1 PENDING Dec 6, 2000 09731359 US Jul 19, 2000 PENDING 09619188 US 09619188 Jul 19, 2000 Aug 11, 1997 08908046

INT-CL: [07] $\underline{\text{H04}} \ \underline{\text{N}} \ \underline{7/12}$

US-CL-PUBLISHED: 375/240.01 US-CL-CURRENT: 375/240.01

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A digital data management and order delivery system is provided. The system includes a storage device for storing digital data and a searching engine for developing a subset of the digital data stored in the storage device in response to inputs received from a first user. The system is also provided with a job order developer responsive to inputs received from the first user for developing a job order which includes: a) at least one copy of the digital data contained in the subset and identified by the first user; and b) a file containing information developed by the first user outside the system. In addition, the system includes a router for electronically routing the job order compiled by the job order developer to a second user specified by the first user.



PALM INTRANET

Day: Monday Date: 2/4/2002 Time: 16:02:49

Inventor Name Search Result

Your Search was:

Last Name = JEBENS First Name = JOHN

Application#	Patent#	Status	Date Filed	Title	Inventor Name
08908046	6321231	150		A DATA MANAGEMENT SYSTEM WITH AN ELECTRONIC STORAGE FACILITY AND ORDER DELIVERY SYSTEM	JEBENS , JOHN H.
09517526	Not Issued	030	03/02/2000	METHOD OF SELLING ON-LINE STORAGE SPACE FOR DIGITAL ASSETS	JEBENS, JOHN
09619188	6332146	150	07/19/2000	DATA MANAGEMENT AND ORDER DELIVERY SYSTEM	JEBENS, JOHN
09731359	Not Issued	030	12/06/2000	DATA MANAGEMENT AND ORDER DELIVERY SYSTEM	JEBENS, JOHN

Inventor Search Completed: Search Completed: No Records to Display.

	Last Name	First Name
Search Another:	jebens	john
Inventor		Search

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L9: Entry 4 of 10 File: PGPB May 31, 2001

PGPUB-DOCUMENT-NUMBER: 20010002204 PGPUB-FILING-TYPE: new-utility

DOCUMENT-IDENTIFIER: US 20010002204 A1

TITLE: Data management and order delivery system

PUBLICATION-DATE: May 31, 2001

INVENTOR - INFORMATION:

RULE-47 COUNTRY NAME CITY STATE Tierra Verde FLUS Jebens, John H. Carlson, Lowell D. Moline TL TIS Bettendorf TΑ US James, Jeffrey Scott

ASSIGNEE-INFORMATION:

NAME CITY STATE COUNTRY TYPE CODE Marshall, O'Toole, Gerstein, Murray & Borun 02

APPL-NO: 09/ 731359 [PALM]
DATE FILED: December 6, 2000

RELATED-US-APPL-DATA:

RLAN	RLFD	RLPC	RLKC	RLAC
09731359	Dec 6, 2000	PENDING	A1	US
09619188	Jul 19, 2000	PENDING		US
09619188	Jul 19, 2000			US
08908046	Aug 11, 1997			

INT-CL: [07] H04 N $\frac{7}{12}$

US-CL-PUBLISHED: 375/240.01 US-CL-CURRENT: 375/240.01

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A digital data management and order delivery system is provided. The system includes a storage device for storing digital data and a searching engine for developing a subset of the digital data stored in the storage device in response to inputs received from a first user. The system is also provided with a job order developer responsive to inputs received from the first user for developing a job order which includes: a) at least one copy of the digital data contained in the subset and identified by the first user; and b) a file containing information developed by the first user outside the system. In addition, the system includes a router for electronically routing the job order compiled by the job order developer to a second user specified by the first user.

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US Pre-Grant Publication Full-Text Database	1
JPO Abstracts Database	1
EPO Abstracts Database	-
Derwent World Patents Index	-
atabase: IBM Technical Disclosure Bulletins]

Search:		△	Refine Search
	Recall Text		

Search History

DATE: Monday, February 04, 2002 Printable Copy Create Case

Set Name	Query	Hit Count	
side by side			result set
DB = USPT,	PGPB, $JPAB$, $EPAB$, $DWPI$, $TDBD$; $PLUR = YES$; $OP = OR$		
<u>L9</u>	L8 and (electronic same mail or e-mail)	10	<u>L9</u>
<u>L8</u>	L7 and password	11	<u>L8</u>
<u>L7</u>	L6 and host	73	<u>L7</u>
<u>L6</u>	L5 and copy	342	<u>L6</u>
<u>L5</u>	L4 and low near resolution	1006	<u>L5</u>
<u></u> <u>L4</u>	L3 and high near resolution	4056	<u>L4</u>
<u>L3</u>	digital adj image	30945	<u>L3</u>
<u>L2</u>	digital with image	92045	<u>L2</u>
<u>L1</u>	digital near image	34146	<u>L1</u>

END OF SEARCH HISTORY

Generate Collection Print

L7: Entry 23 of 169

File: USPT

Dec 18, 2001

US-PAT-NO: 6332146

DOCUMENT-IDENTIFIER: US 6332146 B1

TITLE: Method and apparatus for storing and printing digital images

DATE-ISSUED: December 18, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Jebens; John H. Tierra Verde FL James; Jeffrey Scott Bettendorf IA Carlson; Lowell D. Moline IL

US-CL-CURRENT: 345/428, 705/26, 705/27, 707/10, 707/102, 707/3

CLAIMS:

What is claimed is:

1. A method for printing digital images, the method comprising the steps of:

uploading a first $\underline{\text{high resolution digital image}}$ from a first image provider to an electronic storage facility;

receiving and storing the first high resolution digital image at the electronic storage facility;

permitting the first image provider to identify users who can access the first <u>high</u> resolution digital image stored at the electronic storage facility;

receiving first login information from a first user, the first login information including a first user identification name and a first password;

determining if the first login information is associated with a user identified by the first image provider;

generating a low resolution copy of the first high resolution digital image;

if the first login information is associated with a user identified by the first image provider:

- (a) transmitting the <u>low resolution copy</u> of the first <u>high resolution digital image</u> to the first user via the <u>Internet</u>;
- (b) detecting a selection made by the first user, the selection made by the first user identifying the <u>low resolution copy</u> of the first <u>high resolution digital image</u>; and
- (c) printing the first <u>high resolution digital image</u> in response to detecting the selection made by the first user;

uploading a second <u>high resolution digital image</u> from a second image provider to the electronic storage facility;

receiving and storing the second <u>high resolution digital image</u> at the electronic storage facility;

permitting the second image provider to identify users who can access the second

orage facility;

high resolution digitation image stored at the electronic

receiving second login information from a second user the second login information including a second user identification name and a second password;

determining if the second login information is associated with a user identified by the second image provider;

generating a low resolution copy of the second high resolution digital image;

if the second login information is associated with a user identified by the second image provider:

- (a) transmitting the low resolution copy of the second high resolution digital image to the second user via the Internet if the second login information is valid;
- (b) detecting a selection made by the second user, the selection made by the second user identifying the low resolution copy of the second high resolution digital image; and
- (c) printing the second high resolution digital image in response to detecting the selection made by the second user;

maintaining transparency of the first high resolution digital image to the second user; and

maintaining transparency of the second high resolution digital image to the first user.

- 2. A method as defined in claim 1 wherein the first image provider is a user identified by the first image provider.
- 3. A method as defined in claim 1 wherein a user different from the first image provider is a user identified by the first image provider.

 $104_2/\mathcal{H}_4$. A <u>digital image</u> management system comprising:

an electronic storage facility for providing storage for high resolution digital images of a plurality of unrelated image providers, at least some of the high resolution digital images stored in the electronic storage facility being used to develop corresponding low resolution copies, each high resolution digital image having a higher bandwidth communication requirement than each of the corresponding low resolution copies, the electronic storage facility storing the high resolution digital images of a first one of the image providers such that the high resolution digital images of the first image provider can only be accessed by authorized users identified by the first image provider and such that the high resolution digital images of the first image provider are transparent to other unrelated image providers that are not authorized by the first image provider, the high resolution digital images stored in the electronic storage facility being received via the Internet,

means for allowing an authorized user identified by the first image provider to download a particular low resolution copy from the electronic storage facility to a first location;

means for accepting a work order from the authorized user at the first location wherein the work order identifies a particular high resolution digital image corresponding to the particular low resolution copy;

job order development means responsive to the accepting means for developing a job order including the particular high resolution digital image; and

means for electronically routing the job order to a printer.

- 105 5. A <u>digital image</u> management system as defined in claim 4, further comprising image handling means for processing the high resolution digital images to develop the corresponding low resolution copies.
- 6. A digital image management system as defined in claim 4, further comprising a mail database, the mail database including a conventional address for the authorized user.

- 7. A <u>digital image</u> maggement system as defined in class 4 wherein the first image provider is an authorized user identified by the first image provider.
- 8. A <u>digital image</u> management system as defined in claim 4 wherein a user different from the first image provider is an authorized user identified by the first image provider.
- 9. A <u>digital image</u> management system comprising:

an electronic storage facility for providing storage for digital images of a plurality of unrelated image providers, at least some of the high resolution digital images stored in the electronic storage facility being used to develop corresponding low resolution copies, each high resolution digital image having a higher bandwidth communication requirement than each of the corresponding low resolution copies, the electronic storage facility storing the high resolution digital images of a first one of the image providers such that the high resolution digital images of the first image provider can only be accessed by authorized users identified by the first image provider and such that the high resolution digital images of the first image provider are transparent to other unrelated image providers that are not authorized by the first image provider, the high resolution digital images stored in the electronic storage facility being received via the Internet;

107 a search engine for searching among <u>digital images</u> stored in the storage device;

a communication device operable to allow remote communication by a user with the digital image management system including means for sending a particular low resolution copy of a particular high resolution digital image to the user in response to a request therefor;

means for accepting a user defined work order from a first location via the communication device wherein the work order identifies the particular low resolution copy of the particular high-resolution digital image; and

a router for electronically routing a job order to a printer, the job order including the particular high resolution digital image associated with the particular low resolution copy identified in the work order.

- 10. A <u>digital image</u> management system as defined in claim 9 wherein the first image provider is an authorized user identified by the first image provider.
- 11. A <u>digital image</u> management system as defined in claim 9 wherein a user different from the first image provider is an authorized user identified by the first image provider.
- $08)^{12}$. A <u>digital image</u> management and delivery system comprising:

a storage device for providing storage for <u>digital images</u> of a plurality of unrelated image providers the storage device storing the <u>digital images</u> of a first one of the image providers such that the <u>digital images</u> of the first image provider can only be accessed by authorized users identified by the first image provider and such that the <u>digital images</u> of the first image provider are transparent to users that are not authorized by the first image provider, the <u>high resolution digital</u> images stored in the storage device being received via the Internet;

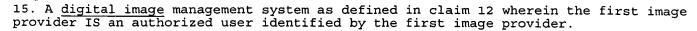
a searching engine for developing a subset of the <u>digital images</u> stored in the storage device by the first image provider in response to inputs received from a first authorized user identified by the first image provider, the searching engine being adapted to download <u>low resolution copies</u> of the subset to the first authorized user; and

a router for electronically routing at least one <u>high resolution copy of a digital</u> <u>image</u> contained in the subset and identified by the first authorized user to a printer.

3. A system as defined in claim 12 wherein the <u>digital images</u> are input to the system by the first image provider via a communication device.

14. A system as defined in claim 13 further comprising an image handler for processing the <u>digital images</u> input by the first image provider, the image handler being adapted to develop <u>low resolution images of the digital images</u> received from the first image provider and to store both the <u>digital images</u> received from the first image provider and the <u>low resolution</u> images thereof in the storage device in

an addressable fashion or future searching.



- 16. A <u>digital image</u> management system as defined in claim 12 wherein a user different from the first image provider is an authorized user identified by the first image provider.
- 17. A method of managing <u>digital images</u> comprising the steps of:

receiving a plurality of <u>digital images</u> from a first image provider via the <u>Internet</u>;

storing a high resolution and a low resolution copy of each of the first plurality of digital images provided by the first image provider in an electronically searchable format on a storage device;

receiving a plurality of $\underline{\text{digital images}}$ from a second image provider via the Internet;

storing a <u>high resolution and a low resolution copy</u> of each of the second plurality of <u>digital images</u> provided by the second image provider in an electronically searchable format on the storage device;

permitting a first authorized user identified by the first image provider to locate and download a <u>low resolution copy</u> of at least one of the <u>digital images</u> provided by the first image provider, the second plurality of <u>digital images</u> being transparent to the first authorized user;

receiving a request from the first authorized user, the request identifying at least one <u>digital image</u>;

receiving instructions from the first authorized user directing that the at least one <u>digital image</u> be printed; and

automatically electronically routing the high-resolution copy of the at least one digital image to a printer.

- 18. A method as defined in claim 17 wherein the first image provider is a user identified by the first image provider.
- 19. A method as defined in claim 17 wherein a user different from the first image provider is a user identified by the first image provider.
- $\frac{1}{20}$. A <u>digital image</u> management and delivery system comprising:

a storage device for storing <u>digital images</u> received via the <u>Internet</u> from a first <u>digital image</u> provider;

a searching engine for developing a subset of the <u>digital images</u> stored in the storage device in response to inputs received from a first user, the searching engine being adapted to download <u>low resolution copies</u> of the subset to the first user;

a job order developer responsive to inputs received from the first user for developing a job order which includes at least one <a href="https://doi.org/10.1001/job/10.1001/jo

a router for electronically routing the job order developed by the job order developer to a printer; and

a user identifier for discriminating between users communicating with the system to control user access to the <u>digital images</u> stored in the storage device, the user identifier limiting access to the <u>digital images</u> provided by the first <u>digital image</u> provider to at least one user identified by the first <u>digital image</u> provider, wherein the <u>digital images</u> provided by the first <u>digital image</u> provider are transparent to all users except users identified by the first <u>digital image</u> provider.

21. A <u>digital image</u> management system as defined in claim 20 wherein the first image provider is an authorized user identified by the first image provider.

- '22. A digital image management system as defined in claim 20 wherein a user different from the first image provider is an authorized user identified by the first image provider.
 - 23. A digital image management and delivery system comprising:
 - a storage device for storing <u>digital images</u> received via the <u>internet</u> from a first <u>digital image</u> provider;
 - a searching engine for developing a subset of the <u>digital images</u> stored in the storage device in response to inputs received from a first user, the searching engine being adapted to download <u>low resolution copies</u> of the subset to the first user;
 - a router for electronically routing at least one high resolution copy of a digital image contained in the subset and identified by the first user to a printer; and
 - a user identifier for discriminating between users communicating with the system to control user access to the <u>digital images</u> stored in the storage device, the user identifier limiting access to the <u>digital images</u> provided by the first <u>digital image</u> provider to at least one user identified by the first <u>digital image</u> provider, wherein the <u>digital images</u> provided by the first <u>digital image</u> provider are transparent to all users except users identified by the first <u>digital image</u> provider are provider.
 - 24. A <u>digital image</u> management system as defined in claim 23 wherein the first image provider is an authorized user identified by the first image provider.
 - 25. A <u>digital image</u> management system as defined in claim 23 wherein a user different from the first image provider is an authorized user identified by the first image provider.

Print Generate Collection

L7: Entry 35 of 73

File: USPT

Mar 16, 1999

US-PAT-NO: RE36145

DOCUMENT-IDENTIFIER: US RE36145 E

TITLE: System for managing tiled images using multiple resolutions

DATE-ISSUED: March 16, 1999

INVENTOR-INFORMATION:

CITY STATE ZIP CODE COUNTRY NAME

Sebastopol CA DeAquiar; John R.

Larkin; Ross M. Rolling Hills CA

ASSIGNEE-INFORMATION:

TYPE CODE STATE ZIP CODE COUNTRY CITY NAME

02 San Diego Optigraphics Corporation

APPL-NO: 8/ 559027 DATE FILED: November 16, 1995

REISSUE-DATA:

DATE-ISSUED DATE-FILED APPL-NO US-PAT-NO

April 30, 1991 November 16, 1993 694416 05263136

INT-CL: [6] $\underline{G06} + \underline{13}/\underline{00}$

US-CL-ISSUED: 345/511; 345/501, 395/200.3, 382/232

US-CL-CURRENT: 345/538; 345/501, 345/555, 382/232, 709/200

FIELD-OF-SEARCH: 395/128, 395/139, 395/114, 395/501, 395/502, 395/507, 395/508, 395/511, 395/200.01, 395/200.02, 395/200.3, 395/200.31, 345/189, 345/201, 345/190, 345/202, 345/428, 345/439, 345/501, 345/502, 345/507, 345/508, 345/511, 345/509, 382/232, 382/244, 382/248, 382/240, 382/238

PRIOR-ART-DISCLOSED:

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ART-UNIT: 273

PRIMARY-EXAMINER: Tung; Kee M.

ATTY-AGENT-FIRM: Knobbe, Martens, Olson & Bear, LLP

ABSTRACT:

An image memory management system for tiled images. The system defines an address space for a virtual memory that includes an image data cache and a disk. An image stack for each source image is stored as a full resolution image and a set of lower-resolution subimages. Each tile of an image may exist in one or more of five different states as follows: uncompressed and resident in the image data cache, compressed and resident in the image data cache, uncompressed and resident on disk, compressed and resident on disk and not loaded but re-creatable using data from higher-resolution image tiles.

39 Claims, 46 Drawing figures

Generate Collection Print

L7: Entry 29 of 73

File: USPT

NY

Jan 4, 2000

US-PAT-NO: 6011905

DOCUMENT-IDENTIFIER: US 6011905 A

TITLE: Using fontless structured document image representations to render displayed and printed documents at preferred resolutions

DATE-ISSUED: January 4, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Huttenlocher; Daniel P. Ithaca

Rucklidge; William J. Mountain View CA

Brown; John Seely Palo Alto CA

ASSIGNEE-INFORMATION:

NAME . CITY STATE ZIP CODE COUNTRY TYPE CODE

Xerox Corporation Stamford CT 02

APPL-NO: 8/ 752497 [PALM]
DATE FILED: November 8, 1996

PARENT-CASE:

This application is a continuation-in-part of Ser. No. 08/652,864 (now U.S. Pat. No. 5,884,084), filed May 23, 1996, commonly assigned and having at least one common inventor.

INT-CL: [6] G06 T $\frac{7}{60}$

US-CL-ISSUED: 395/102; 395/109, 395/112, 395/114, 395/117, 395/187.01, 382/180,

382/299, 707/513

US-CL-CURRENT: 358/1.2; 358/1.13, 358/1.15, 358/1.18, 358/1.9, 382/180, 382/299, 707/513, 713/201

FIELD-OF-SEARCH: 395/106, 395/109, 395/114, 395/102, 395/358, 395/187.01, 395/101, 395/117, 395/112, 382/240, 382/299, 382/305, 382/180, 707/101, 707/513, 707/911, 707/500, 707/104, 380/21, 345/202, 345/203, 345/433, 345/509, 345/515

PRIOR-ART-DISCLOSED:

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ART-UNIT: 272
PRIMARY-EXAMINER: Coles; Edward L.
ASSISTANT-EXAMINER: Rosenblum; David

ABSTRACT:

A method in which first and second representations of a document are provided, for example, by being made available on one or more server computers connected to a computer network, such as the Internet or a corporate intranet. The first and second representations are resolution-dependent structured representations and have, respectively, first and second characteristic resolutions, the second resolution being greater than the first. The first representation, but not the second, is provided in digital form to an untrusted recipient. For example, the first representation can be transmitted through the network from the server on which the first representation is available to a client computer connected to the network. The second representation is converted to a third representation of the document, the third representation being a representation in a human-readable, nondigital form. For example, the second representation can be transmitted through the network in a

secure manner to a true-red printing facility connected to the network. The trusted fatility can then produce the third representation, for example by printing a hardcopy representation of the document. Finally, the third representation, but not the second, is provided to the untrusted recipient, for example, by physically transferring the third representation to the untrusted recipient.

17 Claims, 28 Drawing figures

http://jupiter1:8002/bin/gate.exe

Print Generate Collection

L7: Entry 28 of 73

File: USPT

Mar 28, 2000

US-PAT-NO: 6043909

DOCUMENT-IDENTIFIER: US 6043909 A

TITLE: System for distributing and controlling color reproduction at multiple sites

DATE-ISSUED: March 28, 2000

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Holub; Richard A.

Brighton

NY

ASSIGNEE-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

TYPE CODE

Imagicolor Corporation

Rochester

NΥ

02

APPL-NO: 8/ 606883 DATE FILED: February 26, 1996

INT-CL: [7] $\underline{H04} \ \underline{N} \ \underline{1/23}$

US-CL-ISSUED: 358/504; 358/518 US-CL-CURRENT: 358/504; 358/518

FIELD-OF-SEARCH: 358/504-505, 358/518-523, 358/400, 358/500, 382/162, 382/167

PRIOR-ART-DISCLOSED:

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Search Selected

Search ALL

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ABSTRACT:

The system provides for controlling color reproduction of input color image data representing one or more pages or page constituents in a network having nodes (or sites). Each one of the nodes comprises at least one rendering device. The system distributes the input color image data from one of the nodes to other nodes, and provides a data structure (virtual proof) in the network. This data structure has components shared by the nodes and other components present only at each node. Next, the system has means for providing color calibration data at each node characterizing output colors (colorants) of the rendering device of the node, and means for producing at each node, responsive to the color calibration data of the rendering device of the node, information for transforming the input color image data into output color image data at the rendering device of the node. The information is then stored in the data structure in different ones of the shared and other components. Means are provided in the system for transforming at each node the input color image data into output color image data for the rendering device of the node responsive to the information in the data structure. The rendering device of each node renders a color reproduction of the page constituents responsive to the output color image data, wherein colors displayed in the reproduction at the rendering device of each node appear substantially the same within the output colors attainable by the rendering devices. The system further has means for verifying at each node that the information for the rendering device of the node properly transformed the input color image data into the output color image data, and means for revising the information stored in the data structure at the node responsive to results of the verifying means. Shared components of the data structure may also store color preferences selected by a user. The information producing means of the system may further operate responsive to both the color calibration data and the color preferences. The rendering devices in the system can provide color

reproductions having three or four colorants, and may provide more than four output colors (color inks).

69 Claims, 41 Drawing figures